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| 09/594,995 | 06/14/2000 | Masaki Katayama | P/2171-185 | 7919 |

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EXAMINER

FAULK, DEVONA E

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2644

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/594,995

Applicant(s)

KATAYAMA ET AL.

Examiner

Devona E. Faulk

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09594995.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 11, 12 and 14 is/are rejected.
- 7) ☒ Claim(s) 8, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09594995.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujishita et al. (EP 0 571 638).

Regarding claim 1, Fujishita discloses acoustic equipment capable of processing an audio and video signal comprising a ROM (Read-Only Memory) (22) which reads on “a first memory in which control data is stored” because by definition a ROM type of memory is a data storage device and the microcomputer (12) effects control according to a program written in the ROM (column 5, line 27); a RAM (Random-Access Memory) (23) which reads on “a second rewritable memory for storing control data inputted from an external device” because RAM is read/write memory and it is inherent that the RAM will receive data from an external device because only the microcomputer consist of only the CPU, ROM and RAM. ; and a microcomputer (12) that effects control operation according to a program written in the ROM (22), which reads on “a control section for selecting either one of the first and second memories and for controlling operation according to a control program using the control data stored in the memory selected”. Therefore, Fujishita anticipates all elements of claim 1.

All elements of claim 2 are comprehended by claim 1. Therefore claim 2 is rejected for reasons stated above apropos of claim 1.

Claim 3 claims the audio apparatus of claim 1 wherein the control program is a control program for sound field processing. As stated above apropos of claim 1, Fujishita anticipates all elements of that claim. Therefore, Fujishita anticipates all elements of claim 3 with the exception that the control program is a program for sound field processing. Fujishita further teaches that the acoustic equipment comprises a sound field processing DSP unit (4). Via the control panel a broadcast signal can be selected (column 8, line 19). Frequencies of the broadcast signals are set using keys 34a-34k and the memory operation key (33). This information is used to ultimately set a sound field. It is inherent that the control program is a program for sound field processing (column 9, line 12). Therefore, Fujishita anticipates all elements of claim 3.

Regarding claim 5, Fujishita discloses acoustic equipment capable of processing an audio and video signal comprising a ROM (Read-Only Memory) (22) which reads on "a first memory in which control program is stored" because by definition a ROM type of memory is a data storage device and the microcomputer (12) effects control according to a program written in the ROM (column 5, line 27); a RAM (Random-Access Memory) (23) which reads on "a second rewritable memory in which a control program inputted from an external device is stored" because RAM is read/write memory and it is inherent that the RAM will receive data from an external device because only the microcomputer consist of only the CPU, ROM and RAM. ; and a microcomputer (12) that effects control operation according to a program written in the ROM (22), which reads on "a control section for selecting either one of the first and second memories and for controlling operation according to a control program stored in the memory selected". Therefore, Fujishita anticipates all elements of claim 5.

Claim 6 claims the audio apparatus of claim 5 wherein the control program is a control program for sound field processing. As stated above apropos of claim 5, Fujishita anticipates all elements of that claim. Therefore, Fujishita anticipates all elements of claim 5 with the exception that the control program is a program for sound field processing. Fujishita further teaches that the acoustic equipment comprises a sound field processing DSP unit (4). Via the control panel a broadcast signal can be selected (column 8, line 19). Frequencies of the broadcast signals are set using keys 34a-34k and the memory operation key (33). This information is used to ultimately set a sound field. It is inherent that the control program is a program for sound field processing (column 9, line 12). Therefore, Fujishita anticipates all elements of claim 6.

Regarding claim 12, Fujishita discloses acoustic equipment capable of processing an audio and video signal comprising a ROM (Read-Only Memory) (22) which reads on "a first memory in which control data is stored" because by definition a ROM type of memory is a data storage device and the microcomputer (12) effects control according to a program written in the ROM (column 5, line 27); a RAM (Random-Access Memory) (23) which is read/write memory. The RAM (23) will store frequency information set according to selected broadcast signal (column 8, line 51) which reads on "storing in a rewritable memory second control data which can be used in place of first control data beforehand stored"; and a microcomputer (12) that effects control operation according to a program written in the ROM (22), which reads on "controlling operation using the control data stored", and "selecting either of the first control data beforehand and the second control data stored in the rewritable memory". The method is inherent in the functionality of the acoustic equipment. Therefore, Fujishita anticipates all elements of claim 12.

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Regarding claim 14, Fujishita discloses acoustic equipment capable of processing an audio and video signal comprising a ROM (Read-Only Memory) (22) which reads on “a first memory in which control data is stored” because by definition a ROM type of memory is a data storage device and the microcomputer (12) effects control according to a program written in the ROM (column 5, line 27); a RAM (Random-Access Memory) (23) which is read/write memory. The RAM (23) will store frequency information set according to selected broadcast signal (column 8, line 51) which reads on “storing in a rewritable memory second control program which can be used in place of first control data beforehand stored”; and a microcomputer (12) that effects control operation according to a program written in the ROM (22), which reads on “controlling operation using the control program selected”, and “selecting either of the first control program beforehand and the second control data stored in the rewritable memory”. . The method is inherent in the functionality of the acoustic equipment. Therefore, Fujishita anticipates all elements of claim 14.

3. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Sampsell (U. S. Patent 6,496, 122).

Regarding claim 7, Sampsell discloses an image display and remote control system comprising a VRC controller (160) that can be coupled to an image screen (156) in a touch-screen arrangement. The image screen (156) displays input options corresponding to control signals associated with buttons on the remote control (170). The user may select, in a touch screen arrangement, options displayed on the image screen (156) by touching the image screen (column 7, lines 1-6). This reads on “a display screen for displaying an image corresponding to control data, the image being used to select there through particular control data from a plurality

of control data”. Sampsell also discloses a control transmitter (164) that transmits the control signal to the image processor (172), which reads on “a processor for transmitting to an external device the control data selected via the display screen”. Therefore, Sampsell anticipates all elements of claim 7.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujishita et al. (EP 0571 638) in view of Klingman (U. S. Patent 6,219,736).

Claim 4 claims the audio apparatus of claim 1, further including a USB interface section, wherein the control data is inputted via the USB interface section to the second memory. As stated above apropos of claim 1, Fujishita meets all elements of that claim. Therefore, Fujishita meets all elements of claim 4 with the exception that the audio apparatus further comprises a USB interface section, wherein the control data is inputted via the USB interface section to the second memory. Klingman discloses a universal serial bus (USB) RAM architecture for use with microcomputers comprising a USB RAM device (130) with storage locations (142 and 144) that reside within a RAM device. Klingman’s Figure 5 shows a detailed view of the internal architecture of the USB RAM device (130) with (148) indicating the communication link to the USB host. It is obvious that the RAM would have to receive data through the USB host. Modifying Fujishita’s acoustic equipment by replacing his RAM with the USB RAM of

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Klingman reads on “further including a USB interface section, wherein the control data is inputted via the USB interface section to the second memory”. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fujishita’s acoustic equipment by replacing the RAM in his disclosure with Klingman’s USB RAM for the benefit of providing a high performance serial interface.

5. Claims 9 and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Fujishita et al. (EP 0571 638) in view of Sampsell (U. S. Patent 6,496,122).

Regarding claim 9, Fujishita discloses acoustic equipment, which reads on “audio apparatus” capable of processing an audio and video signal comprising a ROM (Read-Only Memory) (22) which reads on “a first memory in which control data is stored” because by definition a ROM type of memory is a data storage device and the microcomputer (12) effects control according to a program written in the ROM (column 5, line 27); a RAM (Random-Access Memory) (23) which reads on “ a second rewritable memory for storing control data inputted from an external device” because RAM is read/write memory and it is inherent that the RAM will receive data from an external device because only the microcomputer consist of only the CPU, ROM and RAM. ; and a microcomputer (12) that effects control operation according to a program written in the ROM (22), which reads on “a control section for selecting either one of the first and second memories and for controlling operation according to a control program using the control data stored in the memory selected”. Although Fujishita teaches on the above named elements, he fails to disclose a controller including an operation screen for displaying an image corresponding to control data, the image being used to select there through particular control data from a plurality of control data and a processor for transmitting the control data selected via the

operation screen to the audio apparatus. However, the concept of a controller including an operation screen for displaying an image corresponding to control data, the image being used to select there through particular control data from a plurality of control data and a processor for transmitting the control data selected via the operation screen to the audio apparatus was well known in the art at the time of filing as taught by Sampsell. Sampsell discloses an image display and remote control system comprising a VRC controller (160) that can be coupled to an image screen (156) in a touch-screen arrangement. The image screen (156) displays input options corresponding to control signals associated with buttons on the remote control (170). The user may select, in a touch screen arrangement, options displayed on the image screen (156) by touching the image screen (column 7, lines 1-6). This reads on “a display screen for displaying an image corresponding to control data, the image being used to select there through particular control data from a plurality of control data”. Sampsell also discloses a control transmitter (164) that transmits the control signal to the image processor (172). The image processor includes an image source (104), which can be any type of image source, like a tuner (column 4, line 27), that can output audio signals associated with the image signals (column 4, line 39). This reads on “a processor for transmitting to an external device the control data selected via the operation screen to the audio apparatus”. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to modify) Fujishita’s acoustic equipment by replacing his display unit, tuner and controller, with the image screen, tuner or image source and controller of Sampsell for the benefit of having on-screen feedback.

Claim 11 claims the audio system of claim 9 wherein the control program is a control program for sound field processing. As stated above apropos of claim 9, the combination of

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Fujishita and Sampsell meets all elements of that claim. Therefore, the combination of Fujishita and Sampsell meets all elements of claim 11 with the exception that the control program is a program for sound field processing. Fujishita further teaches that the acoustic equipment comprises a sound field processing DSP unit (4). Via the control panel a broadcast signal can be selected (column 8, line 19). Frequencies of the broadcast signals are set using keys 34a-34k and the memory operation key (33). This information is used to ultimately set a sound field. It is inherent that the control program is a program for sound field processing (column 9, line 12). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use Fujishita's acoustic equipment for the benefit of having an apparatus that includes a program for sound field processing.

Claim Objections

6. Claims 8,10 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 703-305-4359. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

DF



MINSUN OH HARVEY
PRIMARY EXAMINER